

## INTRODUCTION

From 1981 to 1983, the Centers for Disease Control and Prevention (CDC) funded 29 states to conduct point-in-time prevalence surveys of behaviors that were associated with an increased risk of developing avoidable illness and/or premature death (i.e., behavioral risk factors). In 1984, the CDC established the Behavioral Risk Factor Surveillance System (BRFSS), an annual telephone survey assessing the health status and behavioral risk factors of the adult population (18 years and older) within 15 participating states. The BRFSS began with four primary goals:

1. To document health trends at the state level;
2. To identify emerging health issues;
3. To compare health behaviors across states;
4. To measure progress toward health goals.

Through cooperative agreements between CDC and state departments of public health, the BRFSS expanded to include all 50 states, the District of Columbia, and three U.S. territories. The Behavioral Risk Factor Surveillance System (BRFSS) is now the largest continuously conducted telephone health survey in the world.

Montana has the distinction of having been one of the 29 states to participate in conducting point-in-time health surveys with CDC in the early 1980s and was one of the original states to secure funding from CDC when the BRFSS initiative began in 1984. The Montana BRFSS sample size has increased from 855 in 1984 to 1,800 in 1996, to 3020 in 2000 and to 5005 in 2004. The number of questions included in the annual survey has increased from 45 questions in 1984 to 174 questions in 2004. In 2004, approximately 418 interviews were completed each month. Subject areas include self-reported health status, access to health care, health awareness, use of preventive services, as well as knowledge and attitudes of health care and health-care practices.

The BRFSS survey provides valuable information on health trends, chronic disease risk and data for monitoring the effectiveness of policies, programs, and interventions. Additionally, BRFSS data are used to identify important health issues for future attention, formulate policies and legislation, and develop public awareness strategies. Each year modifiable behaviors such as smoking, excessive alcohol consumption, overweight, and physical inactivity contribute to a substantial portion of the mortality and morbidity associated with chronic disease and unintentional injury (McKenna et al., 1998; Mokdad et al, 2004). Underutilization of preventive health services (e.g., blood pressure, cholesterol, and cervical cancer screening) may also contribute to morbidity and premature death from many diseases (CDC, 2003a, 2003b). In 2004, seventy-nine percent of Montana deaths were associated with chronic disease and unintentional injury (Table A). Measuring the prevalence of high risk behaviors and preventive health service utilization provides information for developing and monitoring interventions designed to reduce premature death and disease (CDC 2004).

The Healthy People 2010 (Public Health Service 2004) is an on-going national initiative driven by 467 objectives designed to serve as a road map for improving the health of all people in the United States during the first decade of the 21st century. Healthy People 2010 builds on similar initiatives pursued over the past two decades. Two overarching goals—increase quality and years of healthy life and eliminate health disparities—serve as a guide for developing objectives that will actually measure progress. Data from the annual BRFSS survey are one of the primary means of monitoring progress towards achieving specific national year 2010 health objectives. Ten Leading Health Indicators (LHI) were chosen from all of these objectives based on their ability to motivate action for health promotion and disease prevention, the availability of data to measure their progress, and their relevance as broad public health issues (see Appendix A for the LHIs and other indicators).

Complex diseases, such as diabetes, heart disease, and cancer, develop when genetic, environmental, and lifestyle factors work together causing the disease process to start and then

progress. The importance of any one of these factors may differ for each person. Many of these complex diseases develop over many years, and appear to be affected by a number of factors that may increase or decrease a person's risk of developing the disease. To date, we do not have control over some of these risk factors, such as genetic predisposition. However, we can do something about other possible risk factors that affect many of the following leading causes of death.

**Table A. Behavioral Risk Factors Associated with the Leading Causes of Death in Montana, 2004\*.**

<b>Rank</b>	<b>Cause of death</b>	<b>Number of deaths</b>	<b>Percentage of total deaths*</b>	<b>Associated Risk Factors</b>
1	Cancer	1,858	23.0	Smoking, high-fat diet, chronic drinking, environmental exposure
2	Heart disease	1,834	22.7	Smoking, lack of physical activity, high blood pressure, high-fat diet, high blood cholesterol, overweight
3	Chronic lower respiratory diseases	578	7.2	Smoking, environmental exposure
4	Unintentional injury (Accidents)	529	6.5	Binge and chronic drinking, smoking, non-use of safety belts
5	Cerebrovascular disease (including stroke)	484	6.0	High blood pressure, smoking, high blood cholesterol
6	Diabetes	236	2.9	Physical Inactivity, overweight, poor nutrition
7	Alzheimer's disease	228	2.8	Head injuries and risk factors associated with heart disease
8	Intentional Self-Harm (Suicide)	174	2.2	Depression, alcohol or substance abuse, major stressor events
9	Pneumonia and influenza	165	2.0	Smoking
10	Nephritis, Nephrotic Syndrome & Nephrosis	107	1.3	Risk factors associated with hypertension and diabetes, prolonged use of analgesics
	<b>Total deaths from leading causes</b>	<b>6360</b>	<b>78.7</b>	

\* Mortality data are from the Montana Department of Public Health and Human Services, Vital Statistics Bureau, February 2005.

\* Total deaths from all causes in 2004, excluding fetal deaths, were 8,083.

This report summarizes selected results from the 2004 BRFSS survey. Results were tabulated for the overall Montana population, as well as for subpopulations (sex, age class, education level, income class, race/ethnicity, disability status, and health planning region). The numbers reported in the data tables were the actual numbers of respondents, while the prevalence estimates (expressed as percentages) were calculated using weighted data and are representative of the Montana adult population. Variation in risk behaviors and health characteristics among subpopulations were highlighted when appropriate. As a measure of data precision, 95 percent confidence intervals (CI) were presented with the percentage prevalence estimates (see Methods section for discussion).